FIGURE 1

Activation of O₂

$$Fe(II) + O_2 + 2e^{-} \longrightarrow Fe(II) \bigcirc O \longrightarrow Fe(IV) \bigcirc OH$$

Reaction Through Cyclic Ester Intermediate

FIGURE 2

FIGURE 3

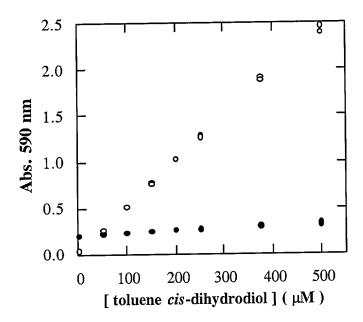


FIGURE 4

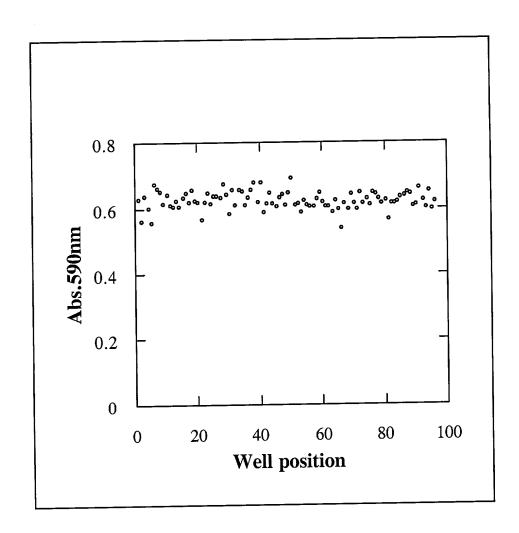


FIGURE 5

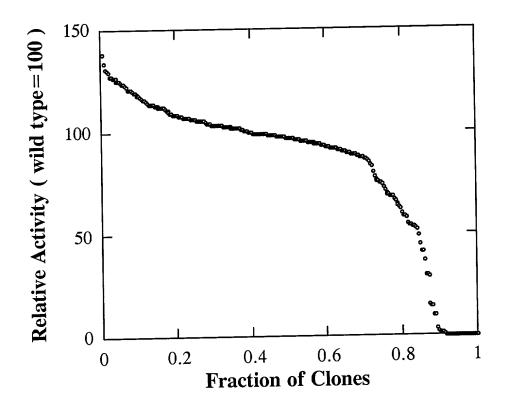


FIGURE 6

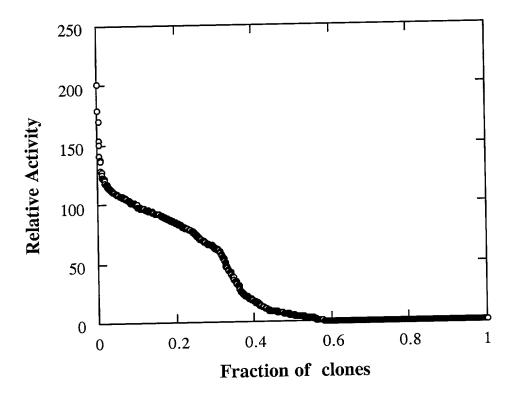
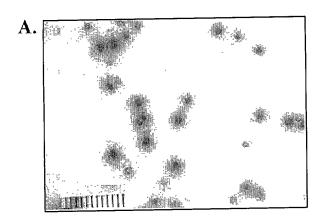
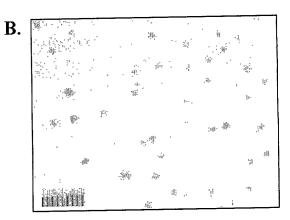


FIGURE 7





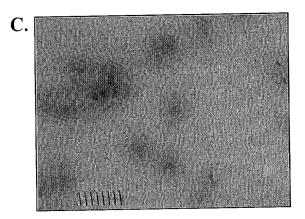


FIGURE 8

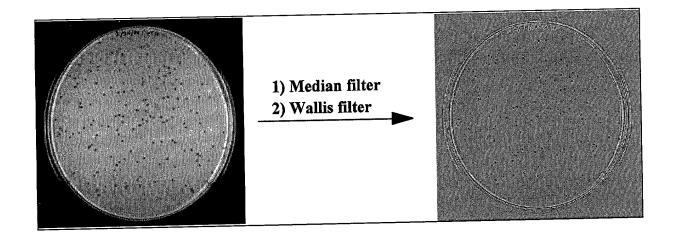


FIGURE 9

FIGURE 10

Pathway I

Pathway II

FIGURE 11

Reaction principle

FIGURE 12

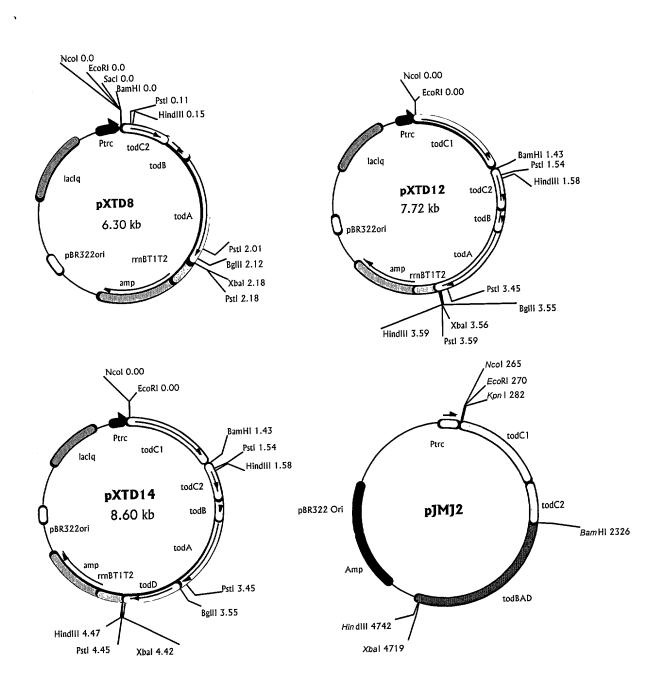


FIGURE 13

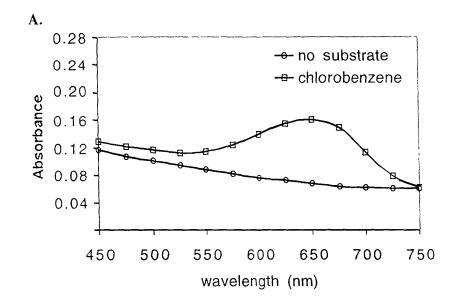
dioxygenase
$$O_2 + NADH + H^{\dagger} NAD^{\dagger}$$

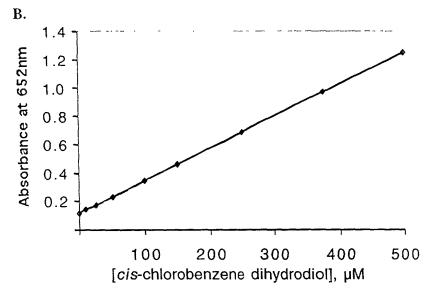
Gibbs reagent

Blue color

FIGURE 14

Validation of spectroscopic detection method





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The Land Court of the Line of the Court of t

FIGURE 15

Image analysis

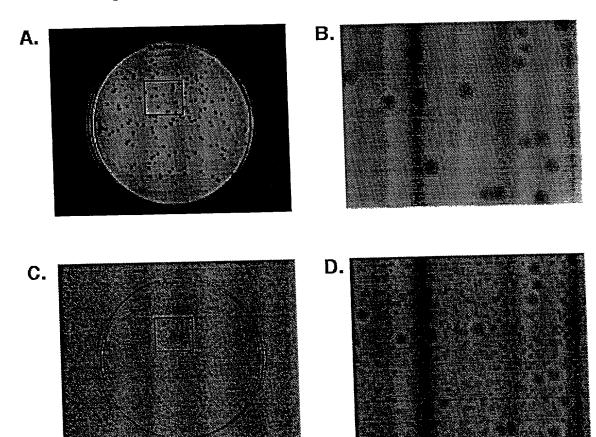
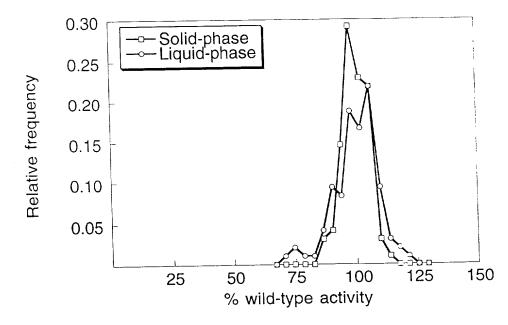


FIGURE 16



B.

I GERESSES TRIBES

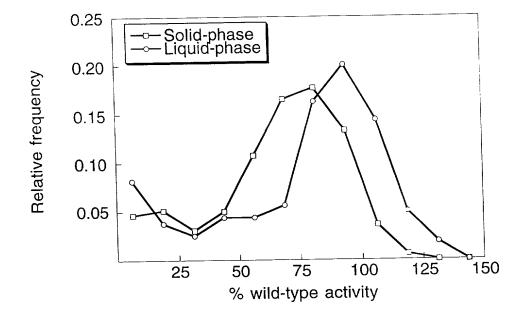


FIGURE 17